

REMARKS

In the Office Action, the Examiner rejected claims 1, 2, 4-9, 12-14, and 16-25. No claims have been amended, canceled or added by this paper. Therefore, claims 1, 2, 4-9, 12-14 and 16-25 remain pending. In view of the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims.

As a preliminary matter, Applicants note that the Examiner indicated on page 2 that the Office Action is a Final Office Action. Applicants assume that the indication of finality is simply a typo as it is indicated in the Office Action Summary as being a non-final action, and there is no other language indicative of finality in the Office Action.

Claim Rejections under 35 U.S.C. § 103(a)

In the Office Action, the Examiner rejected claims 1, 2, 4-9, 12-14, and 16-25 under 35 U.S.C. § 103(a) as being unpatentable over Shih et al. (U.S. Patent No. 6,405,362), hereafter referred to as “the Shih reference” and Mills et al. (U.S. Patent No. 6,353,870), hereafter referred to as “the Mills reference” in view of Kirinaka (U.S. Patent No. 6,052,742), hereafter referred to as “the Kirinaka reference”. Applicants respectfully traverse this rejection.

Legal Precedent

First, the burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d. 1430 (Fed. Cir.

1990). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). The Examiner must provide objective evidence, rather than subjective belief and unknown authority, of the requisite motivation or suggestion to combine or modify the cited references. *In re Lee*, 61 U.S.P.Q.2d. 1430 (Fed. Cir. 2002). Moreover, a statement that the proposed modification would have been “well within the ordinary skill of the art” based on individual knowledge of the claimed elements cannot be relied upon to establish a *prima facie* case of obviousness without some *objective reason to combine* the teachings of the references. *Ex parte Levingood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993); *In re Kotzab*, 217 F.3d 1365, 1371, 55 U.S.P.Q.2d. 1313, 1318 (Fed. Cir. 2000); *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 U.S.P.Q.2d. 1161 (Fed. Cir. 1999).

Second, when prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Third, it is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983); M.P.E.P. § 2145. Moreover, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima*

facie obvious. *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349 (CCPA 1959); see M.P.E.P. § 2143.01.

Official Notice

In the Office Action the Examiner states that the Shih, Mills and Kirinaka references do not disclose the subject matter of claims 16-19 and 22-25. The Examiner, however, takes Official Notice that such features are notoriously well known in the art. In accordance with M.P.E.P. § 2144.03, Applicants seasonably traverse and challenge the Examiner's use of Official Notice. Specifically, as requested in prior responses, Applicants respectfully request objective evidence, such as an additional reference, in support of the Examiner's position if the rejection is to be maintained. If the Examiner finds an additional reference and applies it in combination with the presently cited references, Applicants further request that the Examiner specifically identify the portions of the newly cited reference that discloses the allegedly "well known" elements of the recited claim.

With specific regard to claims 16, 18, 22 and 23, the claims generally recite subject matter relating to determining whether the power supply in the main unit has enough power to activate the option pack before downloading the one or more applications and associated drivers. For example, claim 16 recites, "determining whether the power supply in the main unit has enough power to activate the option pack fully." Claim 18 recites, wherein the downloading, "occurs after the device manager has determined that there is enough power in the power supply of the main unit to activate the option pack fully."

With specific regard to claims 17, 19, 24 and 25, the claims generally recite subject matter relating to determining whether a third memory device in the main unit has enough memory to receive applications and associated drivers from the option pack before downloading the one or more applications and associated drivers. For example, claim 17 recites, "determining whether the third memory device on the main unit has enough

memory capacity to receive the applications and associated drivers store on the first memory device of the option pack.” Claim 19 recites, wherein the downloading, “occurs after the device manager has determined that the third memory device on the main unit has enough memory capacity to receive the applications and associated drivers.”

As discussed in the present specification “the main unit 10 will verify whether it has enough power and memory to accommodate the option pack 12.” Page 23, lines 7-8. “This provides a safeguard against over-loading or draining the resources on the main unit 10.” Page 23, lines 8-9. Contrary to the Examiner’s assertions, Applicants submit that it is not notoriously well-known in the art that a power supply check be implemented after an option pack is inserted into a main unit of the PDA, but before any applications or drivers are downloaded. Further, Applicants submit that it is not notoriously well-known in the art that a memory capacity check be implemented after an option pack is inserted into a main unit of the PDA, but before any applications or drivers are downloaded.

If the Examiner chooses to maintain these rejections, Applicants respectfully request objective evidence in support of this position. Furthermore, if the Examiner does combine an additional reference with the cited references, Applicants request the Examiner do so in a non-final action so that Applicants may have a fair opportunity to consider the new reference and respond. In the event the Examiner is unable to produce objective evidence that the elements of claims 16-19 and 22-25 are well known in the art, Applicants respectfully request withdrawal of the rejection of claims 16-19 and 22-25.

Improper Combination - Lack of Objective Evidence of Reasons to Combine

The Examiner has not shown the requisite motivation or suggestion to modify or combine the cited references to reach the present claims. As summarized above, the Examiner must provide objective evidence, rather than subjective belief and unknown authority, of the requisite motivation or suggestion to combine or modify the cited references. *In re Lee*, 61 U.S.P.Q.2d. 1430 (Fed. Cir. 2002).

In the present rejection of independent claims 1 and 20, the Examiner combined the cited references based on the *conclusory and subjective statement* that it would have been obvious “to modify the Shih and Mills method to transmit card identification data from the option pack to the main unit before the option pack is fully powered in order to increase the flexibility of the method by enabling the main unit to function with option packs that have different operational voltages without the risk of supplying inappropriate operational voltages and harming the option packs.” Office Action, page 4. In combining the references absent objective evidence indicating the desirability of such combination the Examiner is improperly viewing the references with the benefit of hindsight. Essentially the Examiner is picking and choosing among isolated disclosures to deprecate the presently claimed invention. Therefore, Applicants challenge the Examiner to produce *objective evidence* of the requisite motivation or suggestion to combine the cited references, or remove the foregoing rejection under 35 U.S.C. § 103.

Improper Combination – References Teach Different Intended Purposes and Principles of Operation

Additionally, combination of the cited references would require changing the principles of operation as each teach contrastingly different intended purposes and principles of operation. As summarized above, a proposed modification or combination of references is entirely improper and insufficient to support a *prima facie* case of obviousness where the proposed modification or combination would change the principle of operation of the cited reference or render the cited reference unsatisfactory for its intended purpose.

The present application is generally directed to techniques that allow for a partial powering of an option pack when it is first connected to a main unit, to allow the main unit to download identification information. *See* specification, p. 23, ll. 7-9. The purpose of

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this is to allow the main unit to determine whether there is sufficient power to operate the option pack without draining the batteries of the main unit by fully powering the option pack upon insertion. *See id.* p. 23, ll. 11-15. To accomplish this, the option pack has two separate memories, each with a separate communications interface to the main unit. *See id.*, p. 10, ll. 5-10. Accordingly, independent claims 1 and 20 each recite transmitting identification data from the option pack to the main unit “before the option pack is fully powered.”

As recognized by the Examiner, the Shih reference does not disclose partially powering an option pack, much less transmitting identification data before fully powering the option pack, as recited in the present claims. To the contrary, the Shih reference discloses a system wherein insertion of a memory card into a palm-sized PC will automatically trigger an event signal that is sent from the operating system of the palm-sized PC to the shell program on the memory card. Shih, col. 6, ll. 32-37. However, in the series of events that follow the insertion of a card, no partial powering of the inserted device or a configuration that would even allow such a partial powering of the memory card is disclosed by Shih. *See id.*, col. 6, l. 56-col. 7, l. 18. In fact, the activities disclosed for the operation in Shih make it clear that the main device has full access to the memory of the inserted device. “In response to an insertion message, event monitor 210 searches the computer-readable medium that was just inserted for an ‘autorun’ program 15.” *Id.* col.6, ll. 55-59. Shih further indicates that the unit has full access to the contents of the memory card by noting that “[e]ach version of the [autorun] program is for a particular system and/or CPU and is located in a sub-directory of the file system on the computer-readable medium containing programs and files for the particular system and/or CPU.” *Id.* col.6, ll. 62-67. Thus, the memory card is fully powered upon insertion into the main device, in order to allow the appropriate autorun programs to be found. The automatic execution of the autorun program upon insertion of the memory card underpins the primary principal of operation of the Shih reference.

As also recognized by the Examiner, the Mills reference does not disclose the partial powering of an inserted card. The Examiner merely cites the Mills reference as disclosing a second memory device on an option pack that stores identification data and is different from the first memory device. As explicitly stated in the Mills reference, “Figs. 3A and 3B represent the prior art internal architecture of a generic MultiMediaCard and its registers.” Mills, col. 2, ll. 3-5. Fig. 3A is a functional block diagram of the MultiMediaCard which illustrates a number of logical components, such as a memory core, memory core interface, card interface controller and a number of registers. Fig. 3B provides a legend describing the registers illustrated in Fig. 3A. While Applicants do not necessarily agree that the MultiMedia Card of Mills is even compatible with the palm-sized PC of Shih, it is clear that at no point does the Mills reference disclose a partial powering of the MultiMediaCard, either to access the identity information or for any other purpose.

Thus, it is clear that both the Mills and Shih references teach fully powering a card or peripheral device upon insertion of the card or peripheral device. The operation of the Shih and Mills systems are based on the automatic powering of the card or peripheral device. For instance, the Shih reference is automatically powered upon insertion of the peripheral device to power the autorun program. The Examiner cites the Kirinaka reference as disclosing transmitting identification data before the device is fully powered. Following insertion of an expansion card an information section of the card is read prior to powering the card. *Id.* col.3, ll. 47-57. While the Kirinaka reference may disclose transmitting maximum voltage levels from a peripheral device upon insertion, to ensure that the peripheral device is not damaged by supplying an incorrect supply voltage, modifying the Shih reference in such a way would clearly change the principle of operation of the Shih system. That is, Shih reference teaches automatically applying full power to a device upon insertion such that the autorun program is initialized and executed.

In view of the contrasting principles of operation, the Examiner's proposed combination of the primary and secondary references is absolutely improper and cannot stand. The combination of the Kirinaka reference with the teachings of the Mills and Shih references would require substantial reconstruction and redesign of the elements of the Shih and Mills references, as well as change the basic principles under which they were designed to operate. Without the benefit of hindsight it would not be obvious to one of ordinary skill in the art to combine the cited references to arrive at the present claimed subject matter. In view of these incompatible principles of operation, the cited references cannot be combined and the Examiner's rejection is improper.

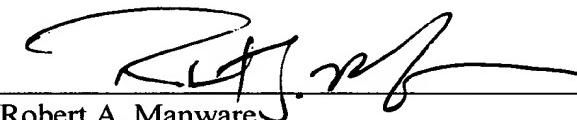
For at least the reasons explained in detail above, Applicants respectfully request withdrawal of the foregoing combination and the corresponding rejections under 35 U.S.C. § 103 of independent claims 1 and 20. Additionally, if an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Therefore, the Applicants further request the withdrawal of the rejection of all claims depending from independent claims 1 and 20.

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Conclusion

Applicants respectfully submit that all pending claims should be in condition for allowance. However, if the Examiner believes certain amendments are necessary to clarify the present claims or if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,



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